



# MTP3000 SERIES TETRA RADIOS SAFER. TOUGHER. EASIER TO USE.

ENHANCED FAMILY INCLUDING  
MTP3500 AND MTP3550



## MTP3000 SERIES ENHANCEMENTS



IP65, IP66 & IP67



WIDEBAND  
350-470 MHz  
& 800 MHz



GPS & BEIDOU  
OR GLONASS

## MTP3500/3550 ADDED FEATURES



END-TO-END  
ENCRYPTION



MAN DOWN



VIBRATE  
ALERT



# MTP3000 SERIES

DESIGNED TO WORK IN THE TOUGHEST,  
MOST DEMANDING ENVIRONMENTS, DAY IN, DAY OUT.

The MTP3000 Series radios are the result of more than 15 years of focus in TETRA on increasing user safety, enhancing efficiency and improving communications. The radios are packed with features which are essential for safe and effective operations, as well as significant improvements in areas such as audio and ruggedness.

The MTP3000 Series radios have all been enhanced with IP65, IP66 and IP67 for dust and water ingress protection, wideband support for 350-470 MHz and 800 MHz as well as an RFID hardware option.

The MTP3100 and MTP3150 are the entry level radios packing in all the TETRA essentials and providing an easy transition from analogue to digital radio.

The MTP3250 add features such as Global Navigation Satellite System (GNSS) capability including BeiDou or Glonass and secure Bluetooth for users who require a feature rich TETRA radio.

The new MTP3500 and MTP3550 radios will further enhance the MTP3000 Series delivering a fully featured radio for public safety and mission critical users with the addition of a man down sensor, vibrate alert and End-to-End Encryption (E2EE).

## KEY BENEFITS

### SAFER



#### STAY IN TOUCH

Be safer and more effective with greater coverage and in-building performance with high sensitivity and power



#### STAY SECURE

Be secure with Air Interface Encryption or End-to-End Encryption to prevent unauthorised access



#### HEAR AND BE HEARD

Outstanding audio means you can be safe and effective in the most noisy and difficult environments



#### ENHANCE YOUR SAFETY

Know that your officers or workers are safe with man down

# SAFER

## SUPERIOR AUDIO AND INCREASED RANGE

The MTP3000 Series is optimised for excellent audio performance in all types of noisy and demanding situations. Audio through both the speaker and accessories is clearer even at full volume, and the user can be heard above loud background noise.

Hardware enabled End-to-End Encryption (E2EE) is the most secure method for preventing the interception of critical voice or data communications.

High receiver sensitivity and high transmit power gives the MTP3000 Series the capability to maintain communications in the most demanding situations at long range, in built up areas and in buildings.

The man down sensor detects whether a radio has been static for a preset time, or has tilted beyond a preset angle. Man down is of particular value for the protection of fire officers in front-line operations, but also lone security personnel or industrial workers operating in hazardous environments.

# TOUGHER

## DURABLE CONNECTORS AND RUGGED DESIGN

The MTP3000 Series is fitted with two new connectors to provide corrosion resistance, ruggedness, conductivity and low insertion resistance. The side connector has excellent pull strength. The bottom connector has a self cleaning mechanism to resist dust and dirt, is easy to clean, and is protected inside the radios.

With IP65, IP66 and IP67 these radios can withstand immersion in a metre of water for 30 minutes, or a high pressure water jet from a fire hose.

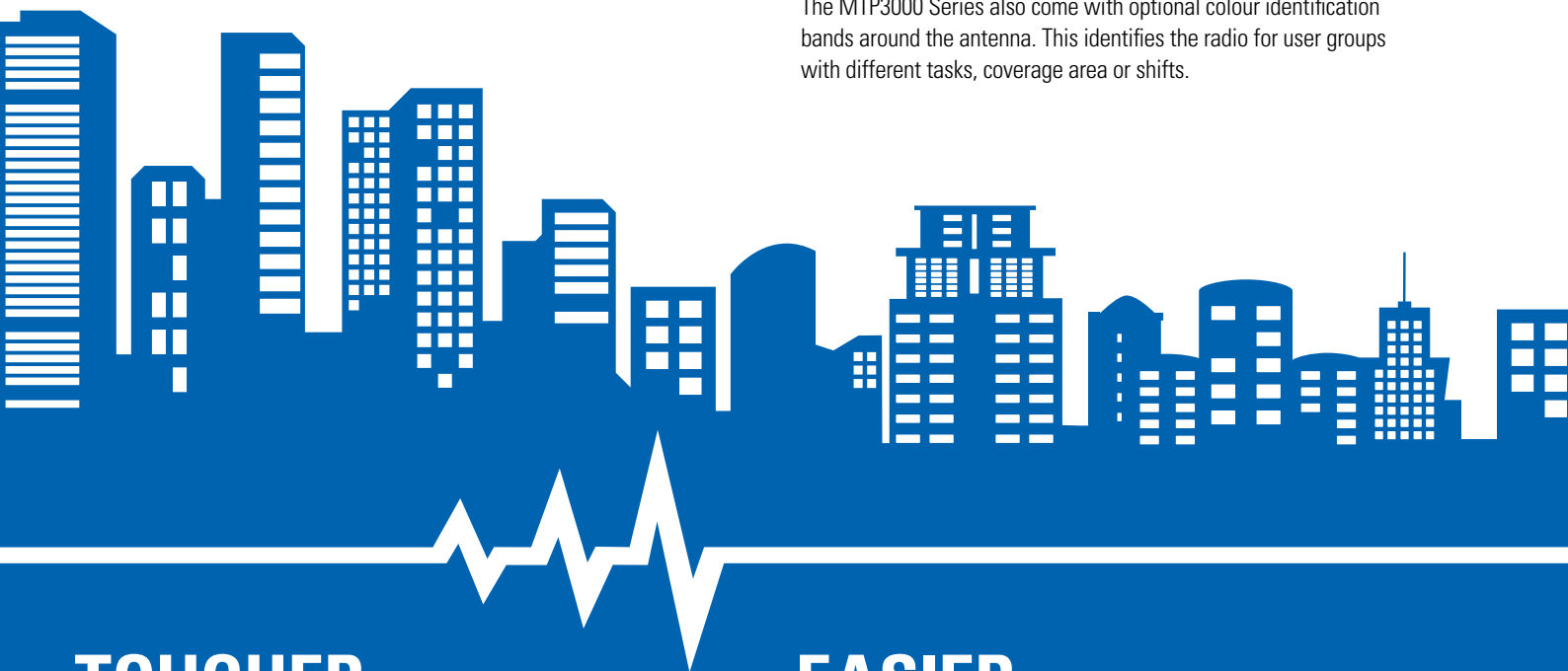
# EASIER

## INTUITIVE HARDWARE AND SOFTWARE FEATURES

The two knob interface will suit users migrating from an analogue radio. The wide transfective screen displays additional characters and is easy to see in both low light and direct sunlight.

Vibrate alert for incoming calls and messages will allow officers or workers to stay covert or be discreet when silence matter.

The MTP3000 Series also come with optional colour identification bands around the antenna. This identifies the radio for user groups with different tasks, coverage area or shifts.



# TOUGHER



## GO WHERE YOU GO

Built to survive hot, cold, dusty and wet conditions with IP65, IP66 and IP67



## BUILT FOR A TOUGH WORLD

Rugged and robust side and bottom connectors for hard use and dirty environments



## CONNECT AND COLLABORATE

Connect to collaborative devices and enable powerful applications with secure Bluetooth

# EASIER



## CUSTOMISE FOR THE END USER

Tough and effective range of audio and energy accessories suitable for the same rough use as the radio



## PICK IT UP AND USE IT FAST

Transition quickly from analogue radios with two control knobs. Navigate quickly through the simple user interface on the clear screen



## STAY COVERT OR BE DISCREET

Vibrate alert for incoming calls or messages when silence is important



## TRACK YOUR PEOPLE AND ASSETS

RFID hardware option for tracking your people and inventory control of your radios

# POWERFUL APPLICATIONS ENABLED WITH SECURE BLUETOOTH

The MTP3000 Series radios are fitted with advanced Bluetooth technology, providing a secure wireless link which opens up a world of possibilities for connecting the radio with devices matched to the specific needs of end users. These collaborative solutions, combining devices and applications can improve the safety, effectiveness and efficiency of your officers and workers.



#### FAST WIRELESS PUSH-TO-TALK

A wireless Push-to-talk (PTT) device can be used when protective clothing makes it difficult to reach the radio quickly or the user wishes to remain covert.



#### REMOTE CONTROL

A smartphone can be used to remotely control the radio, making or answering calls, changing talkgroups or other settings through the secure Bluetooth connection. Particularly useful when the end user needs to be discreet or even covert.



#### BARCODE SCANNER

A barcode scanner with a serial port profile can be linked to the radio and used to check suspect vehicles, identity documents or hazardous packages. To speed up identification and save valuable time, the user can transmit information to be checked against a database and quickly receive results directly to the radio.



#### HEART RATE MONITOR

A heart rate monitor can be connected to the radio and used to detect if the officer or worker is at risk of heart problems or failure. Status messages can be sent over the radio alerting control of any issues.



#### INDOOR LOCATION

Bluetooth beacons in high value buildings can be used detect the presence of the radio and ensure easy location of the officer or worker during an incident.

◀ Optional colour identification bands for groups with different tasks, coverage areas or shifts



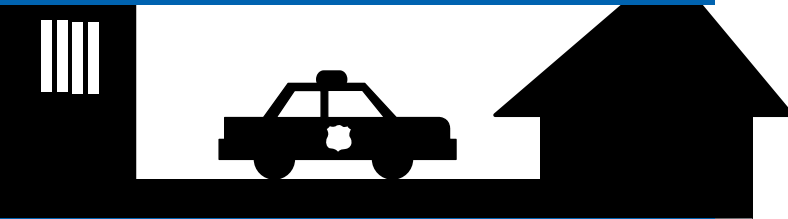
Standard Control Knob RFID Control Knob

◀ RFID hardware option for tracking your people and inventory control of your radios

# MTP3000 SERIES ACCESSORIES

Get the most out of your MTP3000 Series radios by extending its power and reliability with Motorola certified accessories. This includes select 3rd party accessories that have been tested and certified with the MTP3000 Series radios. Our accessories endure rigorous testing to help keep you safer.

## POLICE

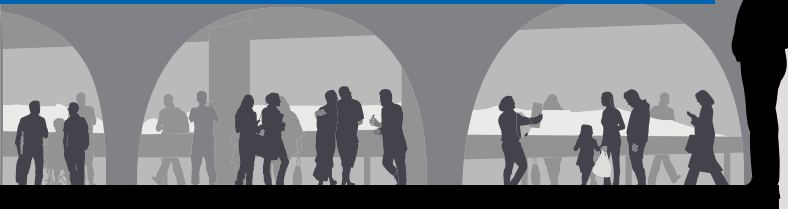


**Bluetooth 2.1** audio is embedded in the radio enabling fast and secure pairing with a variety of Bluetooth accessories. Easy to attach and pair, Motorola Bluetooth accessories enhance performance and security wherever you work. Officers can talk discreetly undercover, move without wires and use their radio like never before.



NNTN8294  
& NNTN8295\*

## SECURITY/SURVEILLANCE



When you're working under surveillance, receiving discreet communication is a must. With the new clear eartube, an earpiece that attaches to our wireless pod, security personnel can communicate privately. The clear eartube ensures a perfect fit and comfort for extended wear.



PMLN7052\*

## FIRE & RESCUE



The **Savox HC-1** is a compact helmet-com unit for professionals working in hazardous conditions. It easily mounts into most helmet types and provides clear and hands-free communication making it ideal for Fire and Rescue workers.

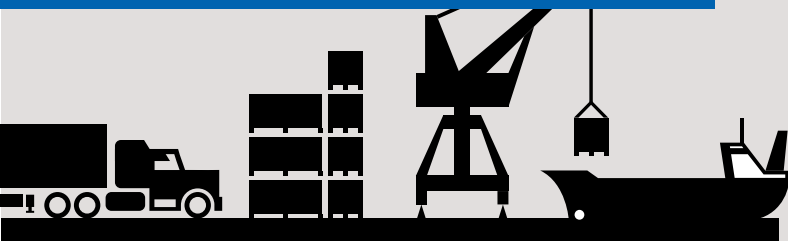
Savox HC-1  
GMMN4585A

Complete the solution with the **Savox C-C400 com-control unit** that enables the use of your two-way radio in hazardous conditions. Designed to be especially robust for the most extreme environments, the extra-large push-to-talk button ensures transmission even when used underneath gear and protective clothing.



Savox C-C400  
GMMN4579A

## TRANSPORTATION



Motorola Remote Speaker Microphones (RSM) ensure clear, loud audio and quality that stands up to the toughest conditions. The Windporting mechanics reduce the adverse effects of wind and rain so your messages are always heard clearly. Submersible models mean that even in extremely wet conditions, you will have continued, reliable communications.



PMMN4075

## MANUFACTURING



In a loud manufacturing plant, keeping communications running smoothly is critical for productivity and safety. The Motorola Heavy Duty Headset with 24dB noise reduction rating has been optimized and certified to meet the radio's performance. This headset is designed to protect your hearing and improve communication in loud environments.



PMLN5731

\*Wireless Pod NNTN8191 must be ordered separately

**SERVICE FROM THE START FOR TETRA TERMINALS ENSURING MAXIMUM PERFORMANCE TO MEET YOUR MISSION CRITICAL REQUIREMENTS**

**PROTECTION. PROVEN.**

We deliver. With our proven capability, you can be sure your equipment is expertly repaired and back in the hands of your users quickly. Using the latest tools and with strict adherence to Motorola engineering procedures, our expert technicians diagnose and repair units to original manufacturing specifications.

**TECHNICAL EXPERTISE:**

Experienced technical support engineers work with you to diagnose and resolve hardware and software problems resulting in swift resolution of issues for your end users.

**CUSTOMER SERVICE:**

A single source of support delivered through our state-of-the-art diagnostics equipment, repair tools, and an extensive inventory of replacement parts help us to provide expert repair on your TETRA terminals.

**PEACE OF MIND:**

Our support programme protects your hardware investments from every angle, all designed to optimise device performance, minimise downtime and keep operations running smoothly and within budget.

**MTP3000 SERIES SPECIFICATIONS**

|                                       | MTP3100 | MTP3150 | MTP3250 | MTP3500 | MTP3550 |
|---------------------------------------|---------|---------|---------|---------|---------|
| Keypad Style                          | Simple  | Full    | Full    | Simple  | Full    |
| IP65/66/67                            | •       | •       | •       | •       | •       |
| Location Services                     |         | •       | •       | •       | •       |
| Bluetooth                             |         |         | •       | •       | •       |
| Man Down                              |         |         |         | •       | •       |
| Vibrate Alert                         |         |         |         | •       | •       |
| End-to-End Encryption                 |         |         |         | •       | •       |
| Multi Slot Packet Data Service (MSPD) |         | •       | •       | •       | •       |

**GENERAL**

|   |   |
|---|---|
| Dimensions HxWxD mm                               | 124 x 53 x 33.5 (with standard battery)                   |
| Weight  | 280g (radio with 1650mAh battery and antenna)             |
| Battery Performance (Class 4 and 1650mAh battery) | Duty Cycle 5/5/90 > 16 Hours                              |
| Battery Performance (Class 4 and 2150mAh battery) | Duty Cycle 5/35/60 > 12 Hours                             |
| Battery   | Duty Cycle 5/5/90 > 20 Hours                              |
| Battery   | Li Ion 1650mAh and 2150mAh                                |
| Loud and clear Audio                              | 2Wrms Audio power (4W peak) through radio and accessories |

**RF SPECIFICATIONS**

|                        |   |
|------------------------|---|
| Frequency Bands        | 350-470 MHz, 800 MHz  |
| Transmitter RF         | Power Class 3L (1.8W) & Class 4 (1W)  |
| Receiver Class         | A and B   |
| Rx Static Sensitivity  | 350-470 MHz: -116dBm (min); -118dBm (typical)<br>800 MHz: -114dBm (min); -116dBm (typical)  |
| Rx Dynamic Sensitivity | 350-470 MHz: -107dBm (min); -109dBm (typical)<br>800 MHz: -105 dBm (min); -107dBm (typical) |

**ENVIRONMENTAL SPECIFICATIONS**

|                                   |   |
|-----------------------------------|---|
| Operating Temperature °C          | -30 to +60  |
| Storage Temperature °C            | -40 to +85  |
| Humidity                          | ETSI 300 019-1-7 class 7.3E                       |
| Dust and Water Ingress Protection | IP65/66/67  |
| Salt Water                        | Submersion, rated at 1m depth for 30 minutes**    |
| Shock, drop and vibration         | ETSI 300-019 1-7 class 5M3; MIL-STD 810 C/D/E/F/G |

**LICENSES/OPTIONS\***

**Efficiency**

|                                       |
|---------------------------------------|
| Language & Keypad Options             |
| Bluetooth Audio & Data Services       |
| DMO Repeater                          |
| Hi / Lo Tx Power                      |
| RUA/RUI - Log On / ID Management      |
| Multi Slot Packet Data Service (MSPD) |
| Secondary Control Channel             |
| Radio Messaging System (RMS)          |
| Call Out                              |
| WAP Browser / WAP Push                |
| RFID Hardware Option                  |

**Safety**

|   |
|---|
| Location Services : GPS, Beidou / Glonass |
| Man Down Sensor                           |

**SECURITY OPTIONS\***

|   |
|---|
| Enhanced Security - OTAR/DMO SCK              |
| Authentication (Mutual)                       |
| Air Interface Encryption Class 1, 2, and 3    |
| Permanent Disable (ETSI, V2-Customer Restore) |
| Temporary Disable (Stun)                      |
| End-to-End Encryption                         |

**INTEGRATED DATA SERVICES\***

|  |
|--|
| Packet Data  |
| SDS Messaging in TMO & DMO   |
| ETSI & Enhanced AT Commands (including Voice Control)                    |
| Short Data Applications  |
| TNP1 - Support simultaneous Packet Data and Short Data Services over PEI |
| iTM Fleet Management (Remote Programming)                                |

## LOCATION SERVICES

|                         |  |
|-------------------------|--|
| Simultaneous Satellites | 12                                       |
| Antenna                 | Integrated external antenna              |
| Tracking Sensitivity    | -160 dBm (typical) -150 dBm (guaranteed) |
| Accuracy                | < 5 metres (50% probable) @ -130 dBm     |
| Protocols               | ETSI LIP & Motorola LRRP                 |

## USER INTERFACE

### User Controls

|   |
|---|
| Easy to use separate volume and talkgroup knobs                         |
| Keypad Lock   |
| User Configurable One touch Buttons & Keys, extensive list of functions |
| Covert Mode   |

### Customisable, User Friendly Menus

|  |
|--|
| Menu Shortcuts - user customisable           |
| Menu Editor, simplify & tailor to user needs |

### Display

|   |
|---|
| Colour Transflective Display, 132x90 pixel screen with 262,144 vivid colours -viewable in bright sunlight |
| Flip screen, large/x-large text & icon options  |
| Screen Saver gif image & text (any user's selection)  |
| Configurable Smart Backlight to optimise power use  |
| Universal Time Display  |
| Multiple Display languages, user selectable   |

### Talkgroup & Call Management - User friendly, flexible, efficient, fast

|   |
|---|
| Talkgroups – TMO Folders 256, TMO Unique 2048, TMO Instances 4000 |
| Talkgroups – DMO Folders 128, DMO Groups 1024                     |
| Favourite Folders - Up to 3                                       |
| Country/Network Code List - up to 100                             |
| Scan lists : 40 lists of up to 20 groups                          |
| Dialling Direct, Scroll, Speed, One touch button/key              |
| AlphaNumeric Search, Call History Redial                          |

### Contact Management - Familiar Cellular Style Interface for Ease of Use

|   |
|---|
| Up to 1000 contacts with 6 numbers per contact, (max 2000 unique numbers) |
| Multiple Dialling Methods to support multiple use cases                   |
| Fast/Flexible Call Set Up / Answer  |
| Set up a Private Call Response to a Group Call via One Touch Button       |
| Multiple Ring Tones   |

### Text & Status Messaging - Familiar Cellular Style Interface for Ease of Use

|  |
|--|
| Text message list : 20 message In / Out box    |
| Intelligent Keypad Text Input (Model specific) |
| Status list : up to 400 pre-defined messages   |

## MAIN VOICE SERVICES

|  |
|--|
| Full Duplex TMO Private, PABX, PSTN, Emergency |
| Half Duplex TMO Private, Group, Emergency      |
| Half Duplex DMO Private, Group, Emergency      |
| Inter-MNI, Gateway, Repeater                   |
| PTT Double Push                                |
| Adaptive Audio Control                         |

### Emergency Call Management

|  |
|--|
| Tactical Emergency Group Call to ATTACHED talkgroup                            |
| Non-Tactical Emergency Group Call to DEDICATED talkgroup                       |
| Individual Emergency Call to PREDEFINED party (half/full duplex)               |
| HOT MIC Emergency - hands free in Moments that Matter                          |
| Emergency Status Msg sent to dispatch console                                  |
| Smart TMO / DMO selection for Emergency Call set up - ensure call gets through |
| Preemptive Priority Calls  |

## OTHERS

|  |
|--|
| Robust and 'quick connect' side connector with high-performance matching accessories |
| Robust bottom connector  |
| SLIM connector Accessories interface   |
| Team ID antenna rings : efficient operations   |

# MTP3000 SERIES SAFER TOUGHER EASIER



A full range of matching and high performance accessories are available on the MTP3000 Series Accessory Catalogue by visiting [www.motorolasolutions.com/MTP3000](http://www.motorolasolutions.com/MTP3000)

\* Some features / options only supported on specific radio models, or may only be available in specific regions. Some features require purchase of software licence to enable. Please check with your Motorola representative for details on availability of specific models and options.

\*\* Dust cover must be fitted to side connector and bottom connector, with antenna and battery fitted. To prevent salt crystal build up rinse in fresh water after exposure.



# MTP3000 SERIES TETRA RADIOS YOUR LIFELINE WHEN TIME IS CRITICAL

For more information on the MTP3000 Series TETRA radios,  
please visit [www.motorolasolutions.com/MTP3000](http://www.motorolasolutions.com/MTP3000)

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New MTP3000 Family brochure APME 03/2015



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